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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/004,981 | 12/07/2001 | Jack V. Smith | | 9243 |

7590 12/04/2003
JACK V. SMITH
P.O. BOX 156
Arden, NC 28704

EXAMINER

WARE, DEBORAH K

ART UNIT PAPER NUMBER

1651

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/004,981 | Applicant(s) SMITH, JACK V. | |
| | Examiner Deborah K. Ware | Art Unit 1651 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-4 are presented for examination on the merits.

Information Disclosure Statement

The Information Disclosure Statement (IDS) filed December 7, 2001, was received, however, no references were actually cited on the form. Nor were there any references submitted for consideration. It is noted that reference was made to description in the background art section of the instantly filed specification and the examiner will thoroughly read through this section for any prior art issues. However, since the IDS is not complete as alleged by Applicant it has not been considered.

Specification at Page 4

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 3-4 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for polyphosphate, sodium tripolyphosphate, pentasodium triphosphate, carrageenan, irish moss extracts, sea weed extracts, red seaweed extracts, beta-1,3,-Dgalactose and alha-1,4-3,6-anhydro-D-galactose

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polysaccharides, phycocolloids, sodium carrageenan, potassium carrageenan, calcium carrageenan, or a salt form of carrageenan, extracts of kelp, extracts of alaria and/or extracts of laver-nori, the specification does not reasonably provide enablement for any compound or active ingredient that can produce a stable high negative ion concentration in a liquid. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to carry out the claimed treatment process using any compound or chemical, for example xanthan gum, for which to practice the claimed invention commensurate in scope with these claims.

There are specific compounds or chemicals for which the claimed invention is enabled for as noted above. However, Applicant's claimed subject matter is directed to any compound for which he is not enabled because one of ordinary skill in the art would need to undergo undue experimentation in order to test for every compound which may be capable of producing a negative ion in solution. Thus, upon successive dissolutions of every single compound as claimed, herein, one of skill would be hard pressed to select for appropriate compounds or chemicals especially because of the unpredictability in the art of ionization.

The ionization art clearly recognizes using ion technology by generating negative ions in the atmosphere but not in solution thus, the unpredictability of such technology is very high when considering that a negative ion solution is used to carry out the claimed invention. One of skill in the art would not be clear upon which active ingredients to select for, other than those which are enabled by the instant disclosure. Thus, Applicant

should limit their claimed method to those negative ion active ingredients for which the instant disclosure is enabled as noted above.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rendered vague and indefinite for failing to recite clear and distinct process steps for step a) or for producing a negative ion solution having a zeta ion potential of at least -10mV or greater. It is unclear what is meant by the present step of "successively dissolving a negative ion active ingredient completely in water. What is "successively dissolving" mean per se, are there several steps of adding the ingredient before completely dissolving in water or what? Also it is unclear that the first step of a treatment type claim should be a method of making the product to be used.

Why does the method of treating incorporate a method of making, per se? Is "a negative ion solution" required to be made and used immediately to maintain a desired redox potential or zeta potential for administering "a negative ion solution" in a human subject? The metes and bounds of the claim can not be determined. In other words, the treatment method has not been clearly and distinctly defined with how it is intended to be carried out. It would appear that all that is required is administering a negative ion solution to a human subject by contacting the subject with the solution in the form of a spray, mist, humidifier, inhaler, liquid drink or shower.

Is the lack of use of a negative ion generator in step b) because the solution to be administered is prepared in the first step? Further, does “by contacting” mean that the solution is to be administered in vivo, topically, or both? These are additional reasons why the metes and bounds of the claims are not clear. Further “the form” recited at step b), line 2, of claim 1 lacks antecedent basis. Also at line 3 of step b) of claim 1 for “the use of a negative ion generator” lacks antecedent basis since no previous recitation of “negative ion generator” has been mentioned in the claim until the end. The claim 1 would read better by deleting “the” at these two instances described above for step b) and also inserting —a—in line 2 of step b) before “spray”.

Claim 2 is rendered vague and indefinite because it is unclear if other components of the Markush group are intended. The metes and bounds of the claim can not be determined. It is suggested to delete “and” and insert --,-- at line 4 and further at line 5 to delete “polysaccharides” and at line 6 to delete “or a salt form of carrageenan” since “calcium carrageenan” is a salt form of carrageenan, and further at last occurrence of “or extracts” in line 6 change “or” to —and--.

Claim 3 is also rendered vague and indefinite because it is unclear if other components of the Markush group are intended. The metes and bounds of the claim can not be determined. It is suggested to change “or” at line 2 to —and--.

Claim 4 is rendered vague and indefinite since it is unclear because the claim is grammatically indefinite. It is suggested to insert —, wherein—before “using” at line 1 of claim 4. Also the phrase “a spray, mist, inhaler, liquid drink or shower” lacks antecedent basis since it is unclear whether these are intended to be additional contacts of the

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treatment method of claim 1. It is suggested to delete "a" before "spray" and replace "a" with --said--. Also is "humidifier" intended to be left out of this laundry list of applicator options? Clarification on the record is requested because examiner can not find readily the answer to this question from the instant specification. It would appear that a humidifier can be used and perhaps is intended in the list for the claimed subject matter.

The claims appear to be free of the prior art.

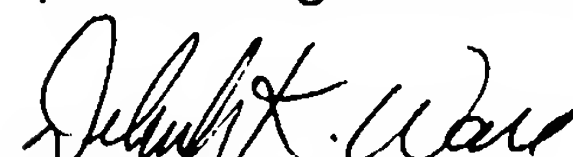
No claims are allowed.

The references listed on the enclosed PTO-892 Form are cited to show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah K. Ware whose telephone number is 308-4245. The examiner can normally be reached Monday to Friday between the hours of 9:30-6:00. Please provide one business day, if necessary, for the examiner to contact you back.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 308-4743. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0196.


DEBORAH K. WARE
PATENT EXAMINER
Deborah K. Ware
October 21, 2003